## **Military Infectious Diseases Research Program**

**MISSION:** To conduct a focused and responsive world class infectious disease research and development program leading to fielding of effective, improved means of protection and treatment to maintain maximal global operational capability with minimal morbidity and mortality.

Research encompasses the following:

- Development of vaccines against militarily important diseases,
- Discovery and development of prophylactic and treatment drugs for parasitic infectious diseases,
- > Techniques for rapid identification of disease organisms and diagnosis of infections,
- Collection and analysis of epidemiological data that aid in control of relevant infectious diseases, and
- > Studies of control measures against insect vectors of infectious diseases.



The Military Infectious Diseases Research Program manages infectious disease research for the DoD. Research is conducted at the Walter Reed Army Institute of Research (WRAIR), the Naval Medical Research Center (NMRC), and the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID). The WRAIR and the NMRC have overseas laboratories in Thailand, Kenya, Indonesia, Egypt, and Peru that conduct research on tropical disease threats to U.S. military and host-country citizens. Diagnostic tests, new drugs, and new vaccines are evaluated in countries where diseases occur naturally. In addition, the overseas labs work to improve global knowledge of emerging infectious diseases by conducting surveillance projects and by working to improve hostcountry surveillance capabilities.



## Licensed Products Include:

- ➤ Hepatitis A vaccine
- > Japanese encephalitis vaccine
- Meningitis vaccine (tetravalent A, C, Y, W135)
- Mefloquine and Halofantrine for malaria
- Adenovirus vaccine
- > Typhoid vaccine
- ➤ Influenza vaccine (WWII)

Products Under Development Include:

- Vaccines, Tafenoquine, and Artelinic Acid for malaria
- Acid for malaria ➤ Vaccines for
- traveller's diarrhea
- ➤ Hepatitis E vaccine
- > HIV vaccine
- ➤ Scrub Typhus vaccine
- Meningitis Group B vaccine
- ➤ Dengue vaccine
- > Hantavirus vaccine
- ➤ Lassa fever prophylaxis

Infectious diseases comprise a major threat to the fighting strength of U.S. forces abroad. In Vietnam, two-thirds of all hospital admissions were due to infectious diseases. Dengue and malaria caused hospitalizations in Somalia, and dengue affected troops in Haiti. Additional threats to soldiers include diarrhea, leishmaniasis, hepatitis, hantavirus infections, lassa fever, meningococcal disease, and HIV. Threats vary depending on the environment in

